Claim Rejections

35USC101

Claims 1-18

Claim 1 does not recite a system that solely comprises a "function to import" and a "function to analyse". Claim 1 clearly states that the system also "processes". The result of this processing is an "electronic screen based product" which in practical terms is a training course for end users. This concept is further developed in Claims 2-18. The result of this 'processing' is most definitely "composition of matter".

The current invention is embodied in our product "Apixel Metamorphosis". The software is used by customers to automatically generate courseware for their staff and/or students. The software represents a huge time and money saving to those customers as the development process is entirely automated and then only requires cursory editing.

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Owens in view of Wolff does not disclose the current invention. It is wrong to conclude that independent Claim 1 relates to the automatic creation of questions as claim 1 does not refer to questions (our system only refers to automatic question generation in dependent Claim 6 and these questions are generated in an entirely different manner to Owens). Owens' system requires painstaking setting up of the source content in order that questions be generated. The key innovation of our invention is that no preparation is required – any source document is acceptable and the system automatically generates a complete course from this source. Owens' system is in no way an automated course generator. It is simply an automatic question generator and relies entirely on course content being correctly structured by the human author.

Claim 1

The examiner notes that my previous arguments of why the present invention is not obvious are convincing but that some of the arguments are not recited in the claims. While the arguments themselves may not be recited in the claims, the core novelty is described in the two fundamental points included in claim 1 that firstly the system will automatically create a series of electronic screens and that the system will automatically populate these screens with appropriate images. This forms the basis of the automated system that I describe in more detail below and it is these two things in combination we believe to be novel and seek to claim.

Owens' system does not disclose a system which automatically processes source documents into courseware. The current invention can process documents in any form without the need for them to be pre-prepared whereas Owens system prescribes a highly structured source document. Further to this, Owen's system is primarily designed to automatically generate questions. This is an additional feature of the proposed system, referred to in Claim 6 but is by no means the central

focus of the system nor is the method of question generation or the resulting questions themselves in any way similar to that of Owens.

Wolff's system does not disclose the method of associating text analysis with image metadata. Wolff's system does something entirely different. It is a system for determining the relative placement for subsequent images based on the placement region of a first image. The examiner refers to "the image to text matching in Wolf(sic)" however, no image to text matching is disclosed by Wolff. Paragraphs 0064-0066 relate to metadata associated with images for the purpose of identifying the appropriate placement region but not to the automatic insertion of images to relate to text content.

It would not have been obvious to one having ordinary skill in the art to come up with the proposed invention because combining Owens' and Wolff's system would simply result in a system which enabled the automatic creation of questions based on pre-prepared source documents with a system which automatically determines the placement of images. It would not result in a system which automates the development of courseware.

The reason why the present invention is not obvious is because all previous authoring systems including that of Owens and Wolff have begun with the assumption that a human author must carefully allocate content whether text or images in order to build courseware. Most of these systems focus on the need to make authoring of content on a screen-by-screen basis easier. The present invention is a paradigm shift from these systems because the application itself replaces these manual procedures. To use the present invention, the author does not have to mark up or structure the source document in any way. The table below shows how the proposed system undertakes the tasks which are normally taken on by a human author. The present invention is compared to both conventional authoring systems and newer Rapid ELearning (REL) systems. With the present invention the only task left for the human author is to *Review and edit authored lesson*.

| Phase | Conventional systems | REL systems | Present invention |
|--|----------------------|-------------|-------------------|
| Content automatically processed from unstructured source documents | | | ✓ |
| Design user interface | | / | / |
| Design screen templates | | √ | 7 |
| Allocate text on each screen | | | / |
| Select and allocate other media on each screen | | | ✓ |

| Design and specify | | | ✓ |
|-----------------------|----------|----------|----------|
| learning activities | | | |
| Program learning | | V | ✓ |
| activities | | | |
| Review and edit | | | |
| authored lesson | | | |
| Management of user | | | √ |
| data and results | | | |
| Publish lesson for | √ | V | ✓ |
| delivery platform | | | |
| Test functionality of | | V | ✓ |
| published lesson | | | |